



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

To account for the origin and development of the neuron-pattern the author suggests that this may be determined by the electrical polarization of the cell (neuroblast), which must lead to changes in its physiological condition and activity. In the stimulation of living protoplasm generally the primary change is probably electrical and this electrical polarization of a neuroblast may determine changes in its rate of metabolism and consequently in its physiological activity.

In a discussion of this question at the present stage of its development we are hampered by a lack of knowledge of the fundamental nature of physiological processes and of the ultimate structure of biological organisms. Although the mechanistic conception of life may not appeal to all, mainly on account of the paucity of facts which can be brought forward to support it, yet the conclusion of the neovitalist that the relation between pattern and process will never be understood is unjustifiable. There is little doubt that the two have a constant and necessary relationship, and for his attempt to elucidate the possible character of this relationship in the origin and development of the nervous system the author is to be commended.

SUTHERLAND SIMPSON

Cornell University

Fünf Reden von Ewald Hering. Herausgegeben von H. E. HERING. Mit einem Bildnis von EWALD HERING. Leipzig, W. Engelmann. 1921. Pp. 140. Price about 75 cents.

Dr. Hering has earned the grateful thanks of all experimental psychologists by this reprint of certain classical addresses delivered by his distinguished father. The addresses are: Ueber das Gedächtnis als eine allgemeine Funktion der organisierten Materie (Vienna, May 30, 1870); Ueber die spezifischen Energieen des Nervensystems (Prague, [1882] 1884); Zur Theorie der Vorgänge in der lebendigen Substanz (Prague, [Feb. 18,] 1888); Zur Theorie der Nerventätigkeit (Leipzig, [May 21, 1898] 1899); and the Antwortrede to the award of the Graefe-medal made at the 33d meeting of the Ophthalmological Society (Heidelberg, [Aug. 6,] 1906). The text has apparently been edited, so far as editing was needed; I notice the removal of a troublesome clause from the third address (p. 64). The book is printed in large and clear type on paper of a rather poor quality. The frontispiece portrait is excellent.

There are some curious omissions. There is no paged table of contents; the fifth address does not figure in the list on cover or title; and we are not told where the addresses were originally printed. The Open Court translation (1895) of the first two—those on Memory and on Specific Energies of the Nervous System—is similarly silent. The address on Memory appeared in the *Almanach der Wiener Akad. der Wissenschaften*, Jahrg. 20; a second edition of the offprint was published in Vienna in 1876; and the address was included in W. Ostwald's *Klassiker der exakten Wissenschaften* (no. 148) in 1905. The address on Specific Energies was given at Prague in 1882 (see p. 79 of the present reprint) when Hering assumed the rectorate of the university; it seems to have remained unpublished until printed (1884) in *Lotos, naturwiss. Zeitschrift* hrsg. v. d. deutsch. naturwiss.-med. Verein f. Böhmen, vol. v. The third address was also published in *Lotos*, vol. ix. The Leipzig lecture was issued in pamphlet-form by Veit & Comp., Leipzig. I do not know whether the Antwortrede has been published before; it is not contained in the report of the Heidelberg Congress in the *Arch. f. Augenheilkunde*, 56, 1907, 93 ff.¹ It is, as the editor remarks in his preface, of especial interest, since Hering uses the occasion

¹The volume is wrongly given as 55 in the *Zeits. bibliographie* (xlvii., 1908, 362, no. 654) and in the *Psychol. Index* for 1906 (13, 1907, 41, no. 649).

to review in brief the whole course of his scientific work, and to acknowledge his intellectual debt to Lamarck and Darwin, Schopenhauer and Fechner. We should all have connected him with three of these men, but I doubt if we should readily have thought of the fourth.

E.B.T.

The Physical Growth of Children from Birth to Maturity. By BIRD T. BALDWIN. University of Iowa Studies in Child Welfare, from the Iowa Child Welfare Research Station. Iowa City, University of Iowa, 1921, Vol. I, No. 1. pp. 411.

The author presents a comprehensive survey of studies which treat of physical growth, together with a more intensive study of the growth of (sometimes only a few) individuals taken at intervals over a considerable period of time. It represents a serious, methodical effort to establish norms which shall be based upon the growth of the same persons and not, as is the rule, upon different persons at different ages. Not the least important part of the *Study* is the plea for standard apparatus and for uniform procedure in making measurements. In the case of chart LIII, p. 150, where he gives the weight in pounds, the author departs from his demand for the universal use of the metric system for scientific work. One may or may not agree in the matter of choice of measurements to be taken; but one must admit that the 23 measurements chosen are, perhaps, as important as any others. We especially welcome the inclusion of psychophysical measures. Some might wish to take fewer measurements, and to work intensively till reliable norms are to be established,—thereby denying or ignoring the doctrine set out in the *Study*, which assumes that normal growth is not only a matter of amount but also of relation; that the relation of weight to height is to be considered just as well as weight itself. In any event, the author does well to emphasize the need of case-histories in an endeavor to determine the relation between growth and nutrition, disease, sex, race, geography and environment.

The first section of the *Study*, which deals with instruments and methods of measurement, is well illustrated by photographic reproductions, so that the form of the apparatus and the manner of their use are perfectly clear. Even more photographs would serve the purpose of standardization, although the description may be taken as ample in most cases. Yet on p. 21 we find that "the child's left middle finger touches a vertical wall or moulding" and "that the observer applies the square lightly against the free end of the middle finger of the left hand;" a statement which is obviously at fault, although one which anybody with sense can correctly interpret; it only emphasizes the importance of illustrations, since standardized procedure is, of all things, the prime requisite. Only a portion of the 23 measurements outlined find a place in most of the tables and charts; only 2 in the charts and tables for babies; 15 in the tables and 3 in the charts for pre-school children; 8 in the charts and 15 in the tables and profiles for school children, while an additional measurement comes into the chapter on anatomical age.

Chapters III, IV and V are replete with tables of averages for groups and of individual measurements, which show the absolute and relative gain in the various physical dimensions for various ages; with charts which give the growth-curves of individual boys or girls in a single dimension; and, of especial note, with the synoptic profiles of growth, which sum up in concise form the growth-history of the individual in 15 dimensions,—although the numerous inversions are inexplicable in terms of any tables given and the author says nothing about them. In the summary at the end of the chapter on infants there are two conclusions which seem to oppose each other. We are told that there is no positive correlation between weight at birth and weight at the end of the first year; in the following paragraph we read that from 60 to 70 percent of the babies which are above average